

PROPERTY #1: TEESDALE

HOMEOWNERS' STORY

This newly completed, highly insulated, passive house has triple glazed windows, fire resistant materials, heat exchange system, bionic wood heater and paper rock bench tops. The homeowner has chosen quality over size in this compact but high tech home.

Kerri chose a semi-rural location so she could build what she wanted at an affordable price. It's easy to see why she fell in love with this bush block with its 300 year old red gums. She bought the land 3 years ago and after researching sustainable building styles decided on a passive house approach. She sought a passionate passiv haus local builder and has really enjoyed the building experience especially working through the design, materials selection and fit-out of her very sustainable dream home.

The ventilation for the whole house is controlled by a Zehnder HRV (heat recovery ventilation) system. It removes the heat from the warm stale air leaving the building and adds it to cooler air being drawn in. It is also integrated with Daikin split air conditioning system.

In the kitchen, she has paper rock bench tops and an induction cooktop. Instead on an overhead exhaust fan, which would puncture the building envelop, an in-bench fan extracts cooking smells which pass through a charcoal filter.

The Passive House principles ensure the house performs amazingly and the homeowner is extremely happy. On an Airtightness – Proclima Intello test the house score was 1 ACH @ 50 Pa. [This means that the volume of air change per hour is one. Typically Australian homes score 20+, and is why our leaky homes are so expensive to heat and cool.]

On this beautiful 2.5 acre bush block filled with 300 year old red gum, all water is treated and reused onsite and pumped underground. She is planting more large trees and smaller understory native plants to encourage the wildlife and has also set up a small Zen garden area.

**A visit to this house will
inspire and inform anyone planning
an energy efficient new build.**

Photos: courtesy Phil Hines Photography



***Talk to technical experts -
the specialist Passivhaus builders –
onsite on SHD***

SUSTAINABILITY FEATURES

Category	Features
House type	Completed in 2018
Lifestyle	Semi rural, single/couple
Building type	Slab – Fully insulated with XPS75 Insulation – Gutex Multitherm 80, diffusion open, R2.4 & Autex polyester batts R2.5
Sustainable design	Passive solar, highly insulated and sealed passive house
Sustainable materials	Triple glazed windows/doors imported from Germany,
Energy efficiency	8.9 stars
Renewable energy	Rooftop solar – to be installed
Heating & cooling	Bionic combustion heater, Zehnder HRV integrated with Daikin split system
Water heating	Sanden heat pump & 80,000l King Span water tank
Fixtures & fittings	LED lights, PaperRock bench tops, Solar/NBN/telecommunications etc. – Futured proofed with all applicable wiring and connection points
Water harvesting/use	All water treated onsite, tanks connected to whole house
Garden/outdoors	Set in 2.5 acres amid 300 year old red gums, with significant additional planting, edible garden, Zen garden
Waste management	Sewer – Taylex ABS system with pressure compensated irrigation system



View short video with Kerri at: www.facebook.com/SHDgeelong/videos/1950350638597242/

EXPERTS ONSITE ON SHD

Builder, APhi Projects – Dale & Scott, specialists in passive house construction

